

OneTree World

Welcome to the cloned wilderness. Welcome to old growth G. M. forestry. Here Natalie Jeremijenko writes about her OneTree project, a cutting edge 'electronic biological instrument', for sensing Global Warming through the genetic offspring of the Biotech revolution

Cloning has made it possible to Xerox-copy organic life and fundamentally confound the traditional understanding of individualism and authenticity. In the public sphere, genetics is often reduced to 'finding the gene for ... (fill in the blank)', misrepresenting the complex interactions with environmental influences and the comprehensiveness of the knowledge linking genes to observable phenomena. The swelling cultural debate that contrasts genetic determinism and environmental influence has consequences for understanding our own agency in the world, be it predetermined by genetic inevitability or constructed by our actions and environment. The OneTree project is a forum for public involvement in this debate, and a shared experience with actual material consequences.

OneTree, is actually one thousand trees, clones, micro-propagated in culture. The clones, were exhibited together as plantlets at Yerba Buena Center for the Arts, San Francisco, then as saplings at Exit Art in New York, to provide the opportunity to see them all together, side by side. Last spring, the clones were planted in public sites throughout the San Francisco Bay Area including: Golden Gate Park; 220 fronting properties; SF School District Schools; BART stations; Yerba Buena Performing Arts Center; Union Square, and other sites. Friends of the Urban Forest, a community tree planting organization, coordinated the planting. [www.fuf.org]

Because the trees are biologically identical, in the subsequent years they will render the social and environmental differences to which they are exposed. The slow and consistent tree growth will record the experiences and contingencies of each public site. They will become a networked instrument that maps the microclimates of the Bay Area, not connected via the Internet, but through their biological material. Each tree(s) can be compared by viewers in the public places they are planted, to become a demonstration, a long, quiet and persisting spectacle, of the Bay Area's diverse environment.

There are also 'electronic clones' in this project that exploit algorithmic (vs genetic) representations of life. Self-replicating algorithms used to simulate complex lifelike phenomena are the fundamental tools that enable complexity science, and are also what the electronic clones (or e-trees) of the OneTree project are based upon. In complexity science you build a 'virtual world', set conditions, interactions, and introduce as many parameters as is computationally practical to produce complex phenomena from underlying and relatively simple formal constraints. The artificial life component of the OneTree project consists of tree growth algorithms (L-systems) that will be distributed on the CD-ROM, 'MUTATE', or can be downloaded from the website. There is a critical difference between the e-trees of the OneTree project and the general complexity science genre, in that the growth rate of the

